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RISOGRAPH
TECHNICAL INFORMATION

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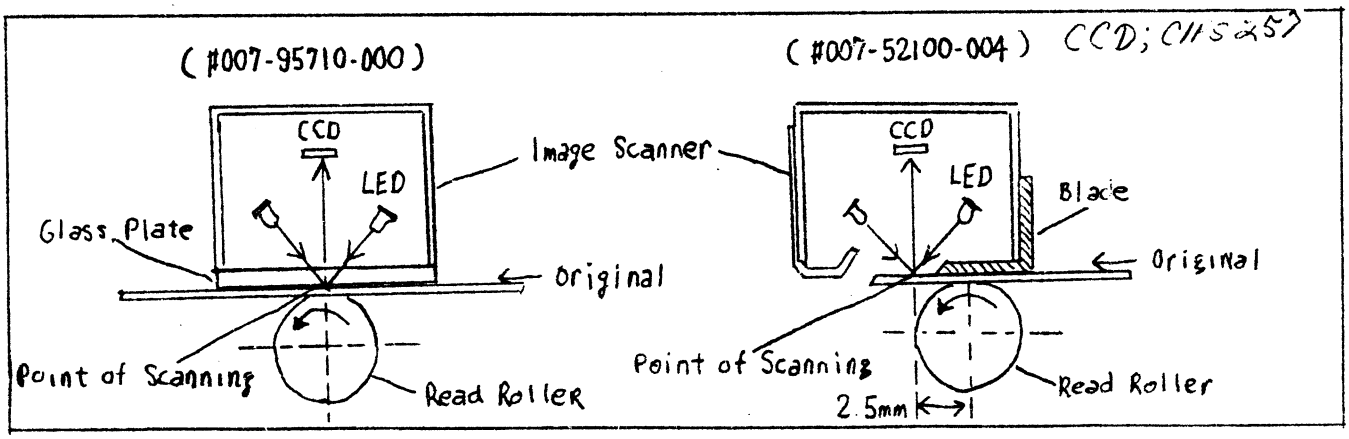
FROM: RICK CHURCH, RISO INC. TECHNICAL DEPT. DATE: 3/7/88

SUBJECT: NEW DESIGN IMAGE SCANNER ISSUE# T-18

The design of the Image Scanner has changed in machines starting with serial number 90410445.

The new Image Scanner construction is illustrated below and will be referred to as PART NAME CCD; CIPS - 257 PART NUMBER 007-52100-004.



The new design required other changes to take place within the master making unit and in those areas that are related to the Image Scanner. Attached to this issue you will find additional part listings for your parts list book indicating parts special to machines with the new Image Scanner. CCD; CIPS - 257. The pages and parts listings are clearly marked, for the machine S/N 90560055 or higher. Please add this information to your parts list book.

*OTHER ATTACHMENTS TO THIS ISSUE:

1) Adjustments for the Image Scanner CCD; CIPS - 257.
2) Adjustments for the IT I/O PCB - 257 special IT I/O PCB for 257 Image Scanner.

ATTACHMENT: 2

SUBJECT: IT I/O PCB - 257 Adjustments

OSCILLOSCOPE TEST PROCEDURES

1) Turn main power switch of RISOGRAPH off.

2) Connect oscilloscope to IT I/O PCB.

   - Channel 1 to TP5 (gain voltage)
   - Channel 2 to TP7 (slice level)
   - External trigger to TP10

   * Oscilloscope range

     0.1 volts/div.

     0.1 ms/div.

3) Remove connector (CN2) on IT I/O PCB.

4) Set master making density button on density 2, and fine tuning density knob to center position.

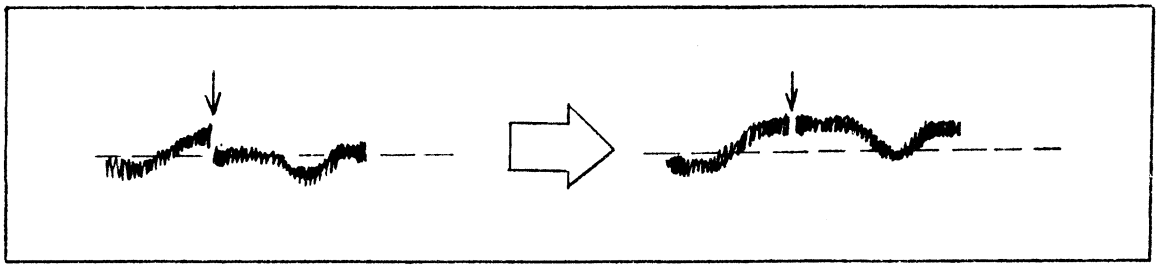
5) Turn main power switch of RISOGRAPH ON.

NOTE:

The image signal displayed on the oscilloscope in the following tests will be displayed as a continuous signal however; keep in mind that the signal is still divided into 4 blocks.

IMPORTANT:

The image signal displayed should be continuous (each block touching) for a 3 volts average. If the signal is broken with a high point or a low point, those blocks must be adjusted to connect for a 3 volt average. If there is not a continuous (3 volt average) signal, printed copy may have separation between blocks.



SLICE LEVEL VR5 AND ACC LOWER LIMIT VR4: (ON I/T I/O PCB)

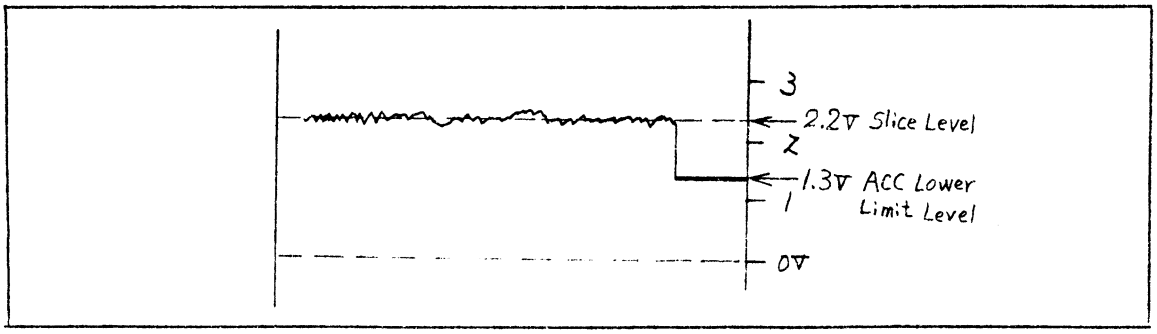
1) Change oscilloscope made to channel 2. Set master making density button on density 2 and fine tuning density knob to center position.

2) Place a sheet of pure (white) paper or a carrier sheet upside down under entire image scanner.

3) Light up LED arrays on image scanner by switching J6 to top connection.

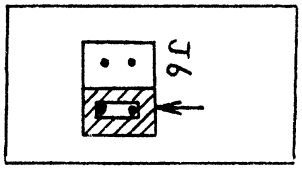
4) Slice level should be displayed at 2.2 volts. If incorrect adjust VR5 for proper setting.

5) ACC lower limit voltage should be displayed at 1.3 volts, if incorrect adjust VR4 for proper setting.

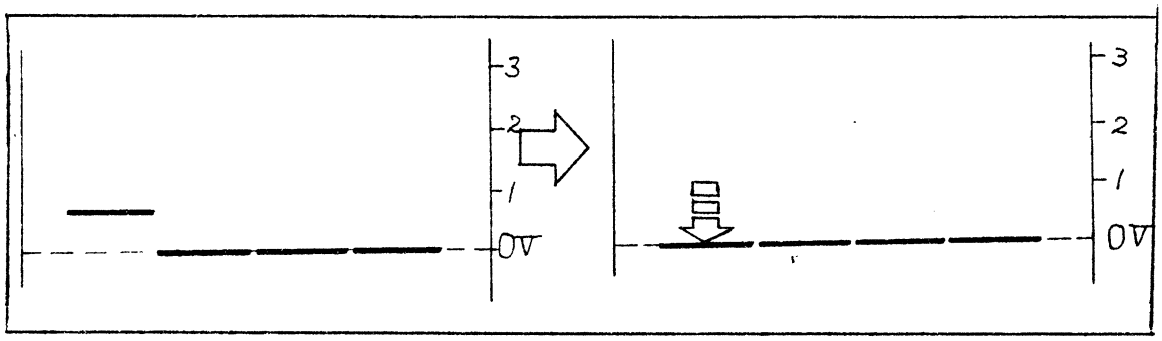


BLACK LEVEL 0 VOLT TEST:

1) Place oscilloscope mode on channel 1. Disconnect connector 2 of IT I/O PCB disconnected. Place a solid black image under image scanner. Image scanner LED arrays should not be lighted in this test, insure J6 is in bottom position so LED arrays are off.



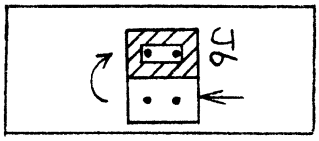
2) Check to see if signal displayed is at 0 volts in all blocks 1-4. If incorrect adjust individual blocks to display 0 volts with VR5 - VR8. (IMAGE SCANNER PCB)



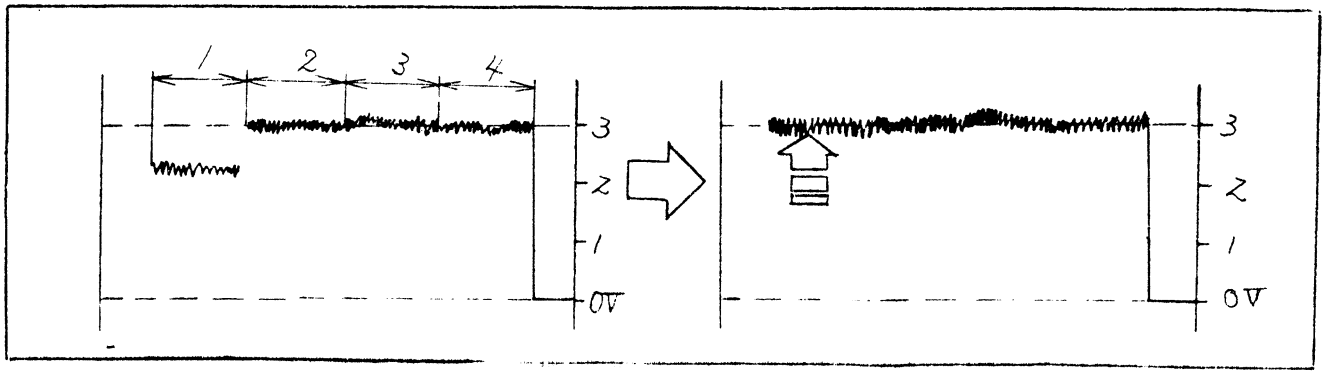
WHITE LEVEL (GAIN VOLTAGE) 3 VOLTS TEST:

1) Place oscilloscope mode on channel 1. Place a pure white sheet of paper or a B4 size carrier sheet upside down. Under new image scanner, disconnect connector 2 on IT I/O PCB.

2) Light up LED arrays on image scanner by switching J6 to top connection.



3) Check to see if signal displayed is at 3 volts in all blocks 1-4. If incorrect adjust individual blocks to display 3 volts with VR1 - VR4. (IMAGE SCANNER PCB)



AFTER COMPLETION OF ADJUSTMENTS:

1) Turn main power switch of RISOGRAPH off.

2) Disconnect oscilloscope connections.

3) Replace J6 to bottom connection.

4) Check all connectors.

NOTE:

If a black line or white line appears on printed copy after adjustments turn VR4 (ACC) clockwise til line disappears. (VR4 ON IT I/O PCB)